

## Transforming Children's Health:

How four child care programs made positive changes in their environments



## Our Formula for a Healthy Lifestyle: 5–2–1–Almost None

Nemours Health and Prevention Services (NHPS) is taking a leading role to help people understand the causes and health implications of obesity and the best ways to promote healthier lifestyles among children and families.

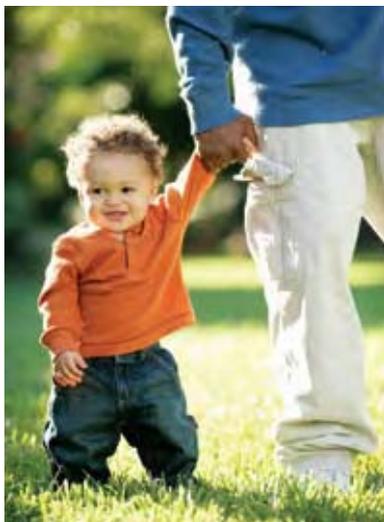


*5-2-1-Almost None* is our formula for a healthy lifestyle.

- Eat five or more servings of fruits and vegetables per day.
- Spend no more than two hours per day in front of a screen (TV, video games, recreational computer time).
- Get at least one hour of physical activity per day.
- Drink almost no sugary beverages like soda and sports drinks.

For more information about our work to make Delaware's Children the Healthiest in the Nation, visit:

[www.GrowUpHealthy.org](http://www.GrowUpHealthy.org)





# Transforming Children’s Health: How Four Child Care Programs Made Healthy Changes

Childhood obesity is a national crisis. Over a third of American children are either overweight or obese.<sup>1</sup> In Delaware, almost 30 percent of preschoolers — children aged two to five — are overweight or obese.<sup>2</sup> Prevention of obesity is the best way to combat its increasing prevalence.

Three years ago, four child care centers in different neighborhoods in Delaware began a process of improving children’s health and successfully integrated healthy eating and physical activity throughout their programs.

In 2008, twenty-eight more centers joined the initial four, which are now mentoring and supporting them in changing their programs. Nemours Health and Prevention Services can provide information about how any child care center in Delaware can make this important transformation.

## Introduction

<b>The Challenge for Child Care Programs</b> .....	2
<b>Before the Transformation</b> .....	3
<b>After the Transformation</b> .....	4

## The Four Centers

<b>Early Childhood Development Center, Delaware Technical and Community College</b> .....	6
<b>Delaware Early Childhood Center</b> .....	7
<b>Telamon Early Childhood Center</b> .....	8
<b>St. Michael’s School and Nursery</b> .....	9

## Conclusion

<b>The Lessons Learned</b> .....	10
<b>Changing Practice, Changing Policy</b> .....	11
<b>Six Key Tips for Transforming Your Child Care Program</b> .....	13

## The Challenge for Child Care Programs

Child care programs provide a largely untapped opportunity to prevent childhood obesity. Most young children in Delaware spend a substantial part of their day in child care. Approximately 70 percent of children from birth to five in Delaware are cared for during the day by someone other than a parent.<sup>3</sup> Children enrolled in full-day child care need to meet at least one-half to two-thirds of their energy and nutrient requirements while in child care.<sup>4</sup>

Child care programs can help young children and their families establish healthy habits which will last a lifetime, such as consuming plenty of fruits and vegetables and getting regular physical activity. Unfortunately, many of the youngest children in the state are not provided with enough opportunities for playful, vigorous movement. Many are also developing poor eating habits.

Close to half of child care centers in Delaware do not serve a fruit daily; approximately the same number do not serve a vegetable daily. Only 41 percent of Delaware toddlers and 31 percent of preschoolers are engaged in active play in child care for more than 60 minutes a day.<sup>5</sup> Active play has many benefits for young children, from improving their physical health to developing their social, emotional, and cognitive skills.





## Before the Transformation

Four child care centers from different areas of the state have, with assistance from Nemours Health and Prevention Services, taken up the challenge of increasing healthy eating and physical activity. The results are impressive. These four very different child care centers illustrate

- 1 what is possible to achieve in a child care setting dedicated to children's health; and
- 2 specific strategies for increasing healthy eating and physical activity that can be used in child care programs.

Like the majority of child care programs in Delaware — and throughout the nation — the child care centers profiled in this report were concerned about the health of children in their care. Some teachers had noticed the growing problem of childhood obesity and knew it was important for children to develop healthy habits early in life. The four centers generally

- served fruit once a day;
- encouraged children to try new foods;
- restricted the amount of fat used for cooking vegetables; and
- rarely used television as a part of their programming.

However, some routine practices of this group of centers may have been inadvertently contributing to the problem of childhood obesity. Research suggests such practices are probably not atypical, and that many child care centers need to change some of the ways they approach children's eating habits and physical activity. For instance, among the four programs, the following issues were common:

- Young children were consuming sugary drinks.
- Active play was often restricted to 15 to 45 minutes per day.
- Teachers did not usually join children during active play.
- Teachers rarely provided education on healthy foods or nutrition.
- Teachers sometimes restricted active play for children who misbehaved.
- There were no written policies promoting healthy eating and physical activity.

When NHPS approached the four child care centers to see if they were interested in promoting children's health by improving some of these policies and practices, the response was positive but skeptical. Some center directors were concerned that promoting healthy eating and physical activity would be burdensome.

Nonetheless, they knew how important it is to keep young children healthy and so they agreed to take advantage of expert help in educating families about nutrition and physical activity and links to community resources on these issues. The four centers embarked on a process that would prove to be transformative.





## After the Transformation: Health-Focused Child Care Environments

Under the guidance of NHPS, these four child care centers conducted a self-assessment, examining food provided at the center and the way that food was served, and the amount and type of physical activity children were engaged in during a typical day.



Centers used the *5-2-1-Almost None* formula for a healthy lifestyle as their guide in assessing their environment and planning what they could do to improve children's health. The goal was behavior change for all of the children enrolled in the programs.

Each center then identified areas for improvement and developed and implemented an action plan tailored to the unique needs of children and families in their care. NHPS provided technical assistance and resources, including a curriculum customized for child care programs on the *5-2-1-Almost None* lifestyle; help with designing and implementing an action plan; child-oriented books and music promoting reduced screen time; and staff engagement plans to ensure the commitment to a healthy lifestyle extended throughout.

The following examples illustrate the variety of ways that each of the centers took on the challenge of promoting healthy eating and physical activity.

## Healthy Homework and More Vigorous Activity:

### ► The Delaware Technical & Community College Child Development Center, Owens Campus

Imagine this homework assignment: wash three tomatoes; watch closely as your mom (or another big person) cuts up the tomatoes; put them in a bowl with some green vegetables (wash those, too)... voila...a salad!

Healthy homework, such as making a fruit or vegetable salad as a family, is one of the myriad of strategies Delaware Tech Child Development Center devised in order to engage parents and children in healthy eating. Engaging parents was particularly important to the center. The center also changed its policy to require parents to pack healthy lunches. Parents were provided with information about how to pack an inexpensive, healthy lunch; soon, all 124 children in the center were eating healthy lunches. If a lunch was brought in that did not meet requirements, then the lunch was sent home with a note guiding the parents and children were given an alternative healthy lunch.



The center kicked off its healthy eating and physical activity program with a fun and interactive educational play which incorporated the *5-2-1-Almost None* behaviors as the children, ranging in age from six weeks through 12 years, demonstrated healthy eating and physical activity concepts for the over 300 family members in attendance.

A requirement for moderate to vigorous and structured physical activity was included in all lesson plans as well as guidelines for staff and children being active together. Staff policy now requires that teachers and other staff eat healthy meals with the children in their care. Teachers abstain from soda, potato chips and other calorie-laden and nutritionally empty foods while eating in front of children.



The Delaware Tech Child Development Center is growing in its commitment to children's health. Serving Sussex County, the center cares for 121 children, aged six weeks to 12 years, and also functions as a training facility for the students in the Early Childhood Education associate degree program at Delaware Technical & Community College.

*For more information:*

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Early Childhood Development Center  
Laurie L. Beauchamp, Program Director  
Delaware Technical & Community College; Jack F. Owens Campus  
Georgetown, Delaware  
Phone: 302.855.5950  
[www.dtcc.edu/owens/cdc/](http://www.dtcc.edu/owens/cdc/)

## Staff Pledge to Be Role Models:

### ► Delaware Early Childhood Center

Sometimes a single, simple step in the right direction makes a huge difference. Delaware Early Childhood Center, which serves 236 children from birth to five throughout the state, made the decision to place a pitcher of water in every classroom for staff, children, and families to use. Having water available helps children and staff to develop the habit of drinking water when thirst strikes, instead of turning to calorie-laden drinks such as juice or sugary beverages.

The Delaware Early Childhood Center also focused on encouraging healthy behaviors by example in the classroom, creating a staff pledge on role modeling. The center provided families with education on healthy eating and physical activity, and incorporated more healthy foods into their menus, especially fruits and vegetables.



*For more information:*

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Delaware Early Childhood Center  
Dr. Janet Cornwell, Director  
Harrington, Delaware  
Phone: 302.398.8945  
[www.lf.k12.de.us/decc/](http://www.lf.k12.de.us/decc/)

## “Buying” Zucchini for Family Meals:

### ► Telamon Head Start

More than 230 children in Head Start at Telamon Corporation in Sussex County can now “purchase” (with play money) real fruits and vegetables at a weekly market and bring them home for family meals and snacks. Telamon provides an array of Head Start programming and seasonal migrant worker programming to Delaware’s rural and low-income families. Telamon is dedicated to serving the needs of the whole family.



With the needs of the family in mind, Telamon kicked off their healthy eating and physical activity program with a field day — one of the most popular events ever held by the organization. Teachers and families were energized by the enthusiastic participation and field day became an annual event. Telamon also created new lesson plans and policies requiring physical activity to be part of the daily curriculum, changed its menus to incorporate more healthy foods, and created a fitness room to help staff in their fitness efforts.

Telamon places particular emphasis on staff wellness and role modeling. When staff did not initially receive the policy changes with open arms, the center leadership consulted with NHPS and persevered through the adjustment period to achieve staff buy-in. Staff were offered worksite wellness programs to demonstrate the importance of healthy eating and physical activity.

Telamon then instituted the weekly fruit and vegetable market to help children enjoy and learn about trying new fruits and vegetables. A tremendous success, the market allows both children and parents to sample new foods and improve the quality of their diets.

*For more information:*

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Telamon Early Childhood Center  
Doris Gonzalez, Executive Director  
Georgetown, Delaware  
Phone: 302.934.1642  
[www.telamon.org](http://www.telamon.org)



## New Tables and Sugar Snap Peas:

### ► St. Michael's School and Nursery

At St. Michael's School and Nursery, children and families are encouraged to try new fruits and vegetables, such as sugar snap peas. When promoting a new food, information about the food is shared with staff and families and the food is incorporated into the menu. Most of the time, the children enjoy the new food and, although not every child likes every new taste, a positive attitude is maintained. St. Michael's also changed the eating environment for children by obtaining new tables that promote a family style meal. The center also encouraged greater teacher and child interaction at meal time and created an awards program for children who try new fruits and vegetables. The 185 children served by St. Michael's now have regularly scheduled activities in the physical activity room with more emphasis on vigorous movement throughout the day.



Founded in 1890, St. Michael's is the oldest of Delaware's early child care programs. Providing a comprehensive learning environment for Wilmington's children, St. Michael's remains a non-profit education facility and a related agency of the Episcopal Diocese

of Delaware. St. Michael's continues to develop its approach to children's health and to educate families about the importance of healthy eating and physical activity.

#### *For more information:*

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St. Michael's School and Nursery  
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## The Lessons Learned

Transforming an entire program's approach to food and activity may seem like a tall order, but four child care centers in Delaware have shown that it is not only possible, but a tremendous benefit for families. Families are incorporating the lessons their children are learning in the classroom into their daily lives. For instance, one mother from Telamon commented that her child pointed out and requested broccoli when they went grocery shopping. Broccoli had also been the child's choice at the Telamon market that month. Parents have reported that they've learned to turn off the television more often and dance with their kids instead, since they have seen how much fun they had doing it as part of their healthy homework that month.

The gains from these types of changes far exceed the effort it takes to make them: when children have support for healthy behaviors at home and at their child care centers, those behaviors are more likely to become *healthy habits for life*. Visit the NHPS website at [www.GrowUpHealthy.org](http://www.GrowUpHealthy.org) to learn more about how to transform your child care program's approach to healthy eating and physical activity.





## Changing Practice, Changing Policy

Until 2007, child care regulations in Delaware were the most outdated in the nation. Policy makers and NHPS staff observed the step-by-step changes being made in the four child care centers and were convinced that standards to improve healthy eating and physical activity in all licensed child care centers were not only important — but achievable.

Major revisions were made to regulations affecting center-based, after-school, and family-based care, including regulations that would reduce sedentary activity and promote healthy eating and physical activity. By the end of 2008, these regulations will apply to both center-based programs and family child care providers.

Key physical activity changes include:

- for every three hours a child is in a child care program, 20 minutes of moderate to vigorous physical exercise will be planned and implemented;
- while awake, infants are limited to 30 minutes of time spent in swings, strollers, and other confining equipment;
- use of TV, videos, video games, etc. is prohibited for children under age two and limited to no more than one hour for older children. Parent permission is required for the use of any media.

## Nutrition Regulations Go Into Effect

In Delaware, all child care programs must follow the standards of the Child and Adult Care Food Program (CACFP). Key nutrition regulation changes which will go into effect in late 2008 include:

- only 100 percent fruit juice may be served, and only 1 serving per day is allowed. No juice is allowed for infants under 1 year of age;
- only low-fat (one percent or non-fat) milk may be served to children over two years of age;
- calories from fat are limited to no more than 35 percent of total calories;
- calories from sugar are limited to no more than 35 percent of total calories.

### **Acknowledgments: Champions for Children's Health**

NHPS wishes to acknowledge the tremendous effort and outstanding work of the four child care centers who blazed new trails for children by becoming champions of healthy eating and physical activity. Every visit to one of these centers inspires NHPS with the knowledge of what is possible and with a vision of the future — healthy children. Thank you to these centers for the willingness to improve children's health and to mentor the next generation of champions for children's health.

- Early Childhood Development Center
- Delaware Early Childhood Center
- Telamon Early Childhood Center
- St. Michael's School and Nursery

### **Nemours Health and Prevention Services Technical Assistance**

NHPS offered the four centers profiled here, and is now offering 28 additional centers, a comprehensive technical assistance program that includes participation in a learning collaborative in which experts and other centers share knowledge and techniques about healthy eating and physical activity. The centers not only develop expertise on what constitutes healthy eating and sufficient physical activity for children, but also learn how to apply their knowledge to their own sites.

NHPS offers tools on healthy eating and physical activity that are customized for child care centers; child-friendly books and music that promote reduced screen time; strategies for staff engagement that can be adapted to each center's unique situation; and sustained support for implementation of healthy changes. The results: over 3,700 children from a total of 32 centers (the original four centers and the 28 who later joined) are engaged in changing their behaviors, and in many cases, entire families are developing new, healthier approaches to eating and physical activity.



## Six Key Tips for Transforming Your Child Care Program

- 1** Involve staff and families when making choices on nutrition and physical activity changes. Ask them to help decide what changes to focus on and get their feedback to improve the work.
- 2** Look at the menu and use the Best Practices Guide for Healthy Eating found on [www.GrowUpHealthy.org](http://www.GrowUpHealthy.org) to make easy, low-cost changes that will benefit the children. Add more fruits and vegetables to every meal. Offer water, one percent, or fat-free milk and use whole grains when possible.
- 3** Look at the portion sizes served to all infants and children. They have small stomachs and we tend to serve them more than they need. Use the pictures in the Best Practices Guide to help get the right amount on their plate. If they are still hungry, they can always be given seconds.
- 4** Serve family style so children learn to put the right amount on their plate from the beginning. It helps reduce waste and it helps children only eat as much as they need.
- 5** Limit or eliminate “screen time,” including TV, videos, computer games, etc.
- 6** Offer physical activity breaks throughout the day. All children from infants to preschoolers can and should experience moving every hour: 10 minutes here and 10 minutes there will add up — and children will experience the benefits.

### NOTES

1. Headley AA, Ogden CK, Johnson, CL et al. Prevalence of overweight and obesity among US children, adolescents and adults, 1999-2002, JAMA, 2006; 291:2847-2850.
2. The prevalence of overweight/obesity (BMI  $\geq$ 85th percentile) for DE children age 2-5 years is 28.9%, based on data from the 2006 NHPS Delaware Survey of Children’s Health.
3. 59 percent of Delaware children are in Center-based care and 30 percent are in family-based care. National Survey of Children’s Health, 2003.
4. Story M, Kaphingst KM and French S, The Role of Child Care Centers in Obesity Prevention, The Future of Children, 16, 1, 2006.
5. 2006 Delaware Child Care Provider Survey, Nemours Health and Prevention Services, DE.

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